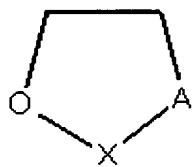


**ABSTRACT OF THE DISCLOSURE**

Disclosed is an electrolyte including a non-aqueous organic solvent, a lithium salt and an additive represented by formula 1:



(1)

5 where X is a functional group with Y, where Y is an element belonging to Groups 3, 4, 5, or 6 of the Periodic Table; and A is O or NR, where R is a C<sub>1</sub> to C<sub>6</sub> alkyl group; wherein, if X is CO, A is NR. Batteries using such a solvent in the electrolyte are less susceptible to swelling without any decrease in capacity or cycle life characteristics.

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